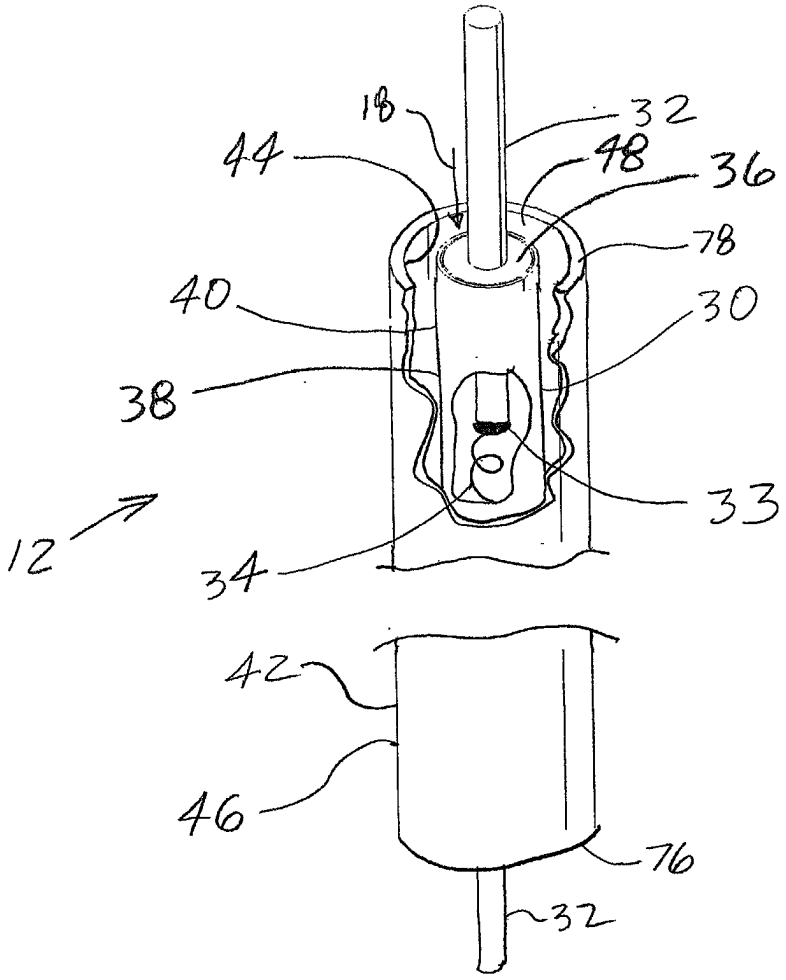

FIG.1

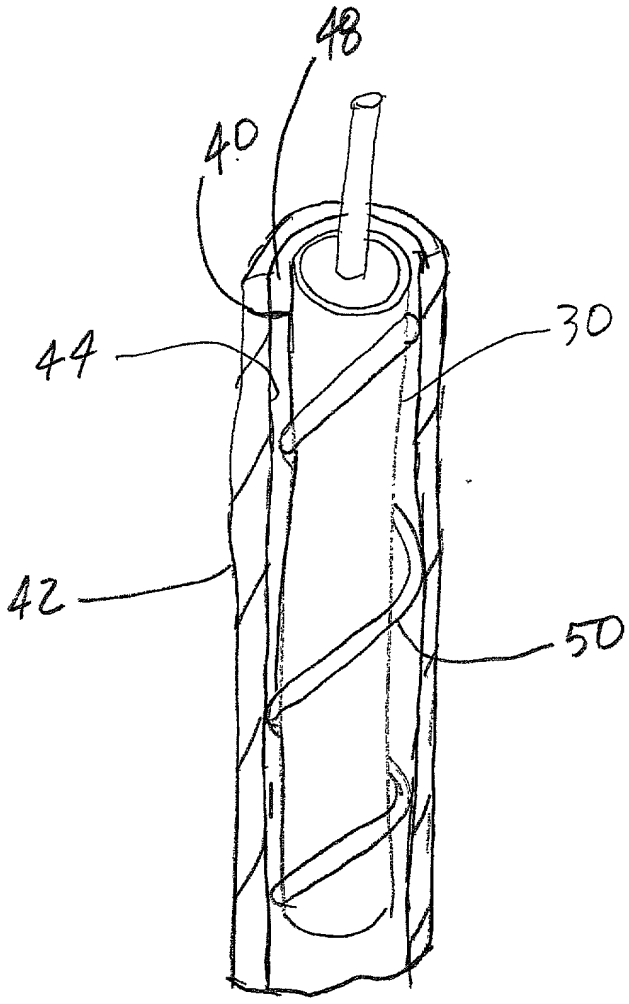

FIG. 2

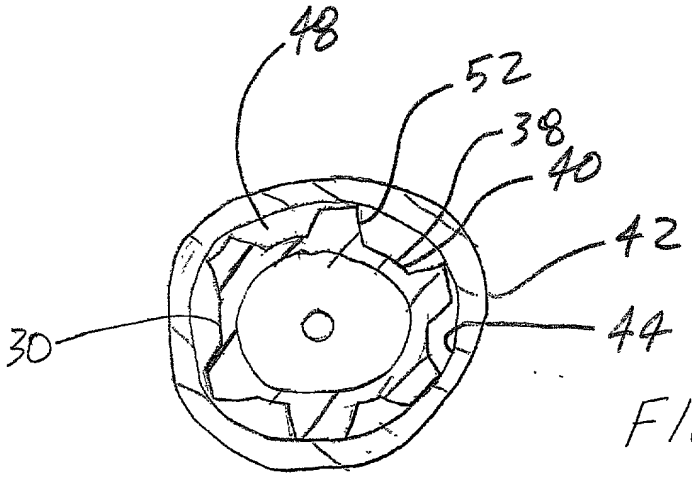

FIG 3A

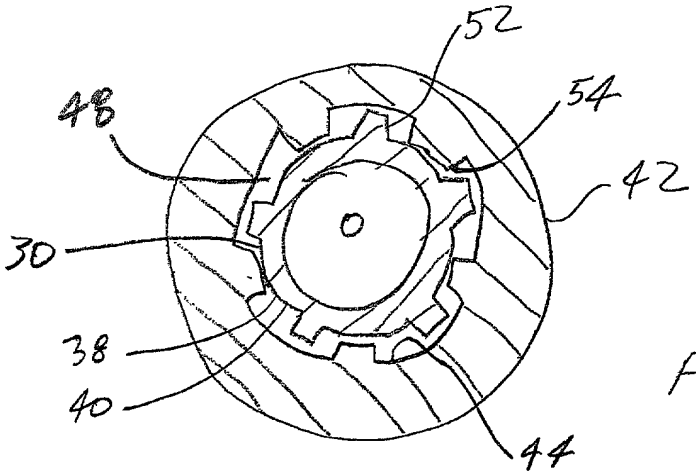

FIG 3B

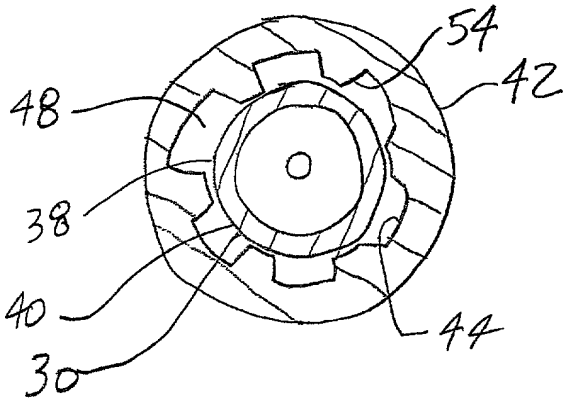

FIG 3C

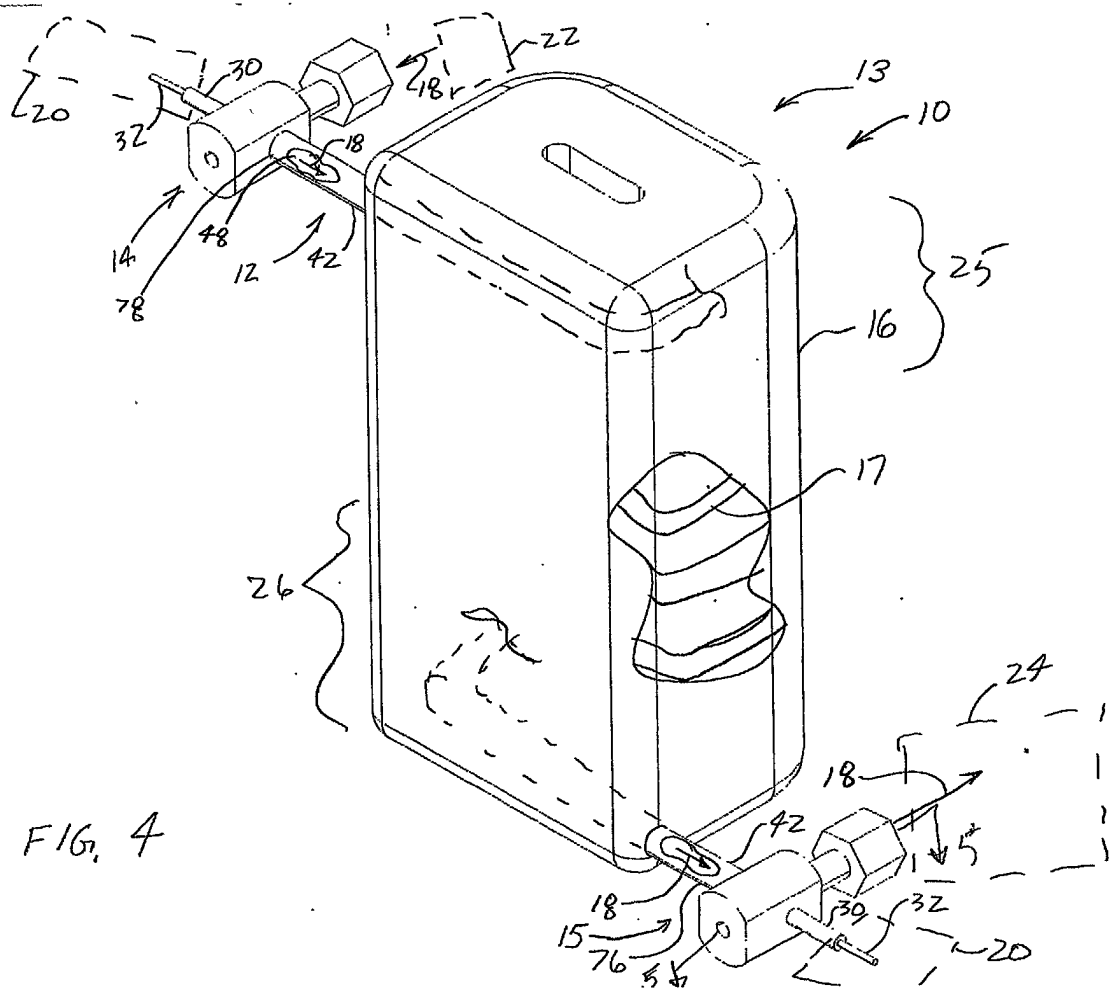
20
30
32
18
22
18'
13
10
14
48
12
42
78
25
16
17
26
24
18
42
18
15
76
39
32
20

FIG. 4

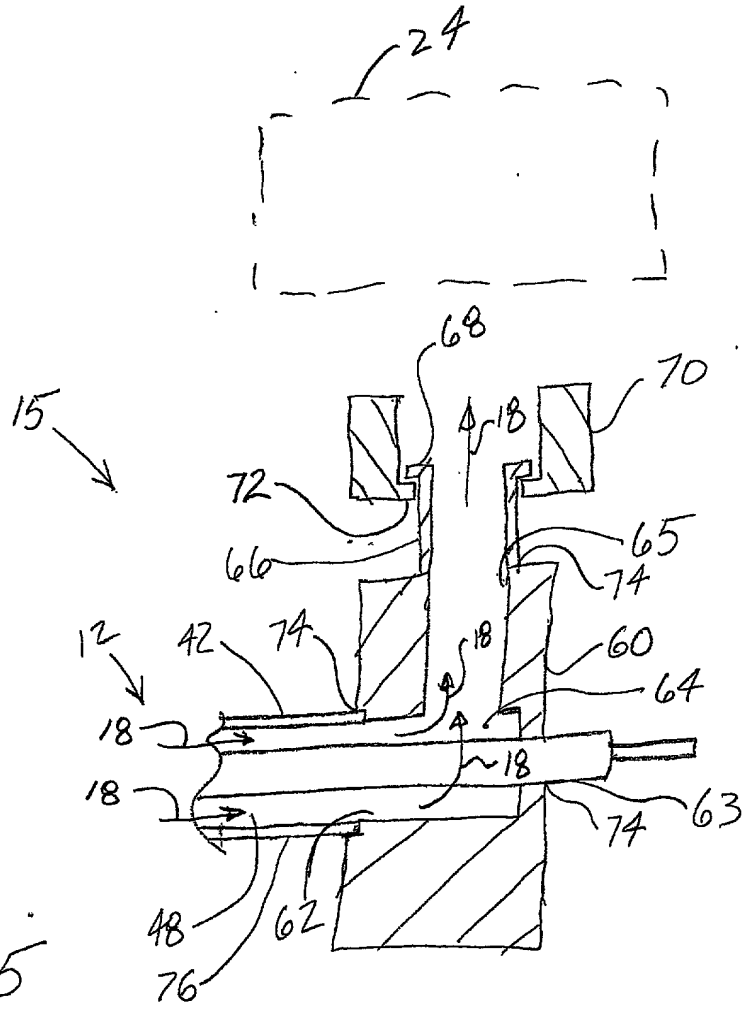

FIG. 5

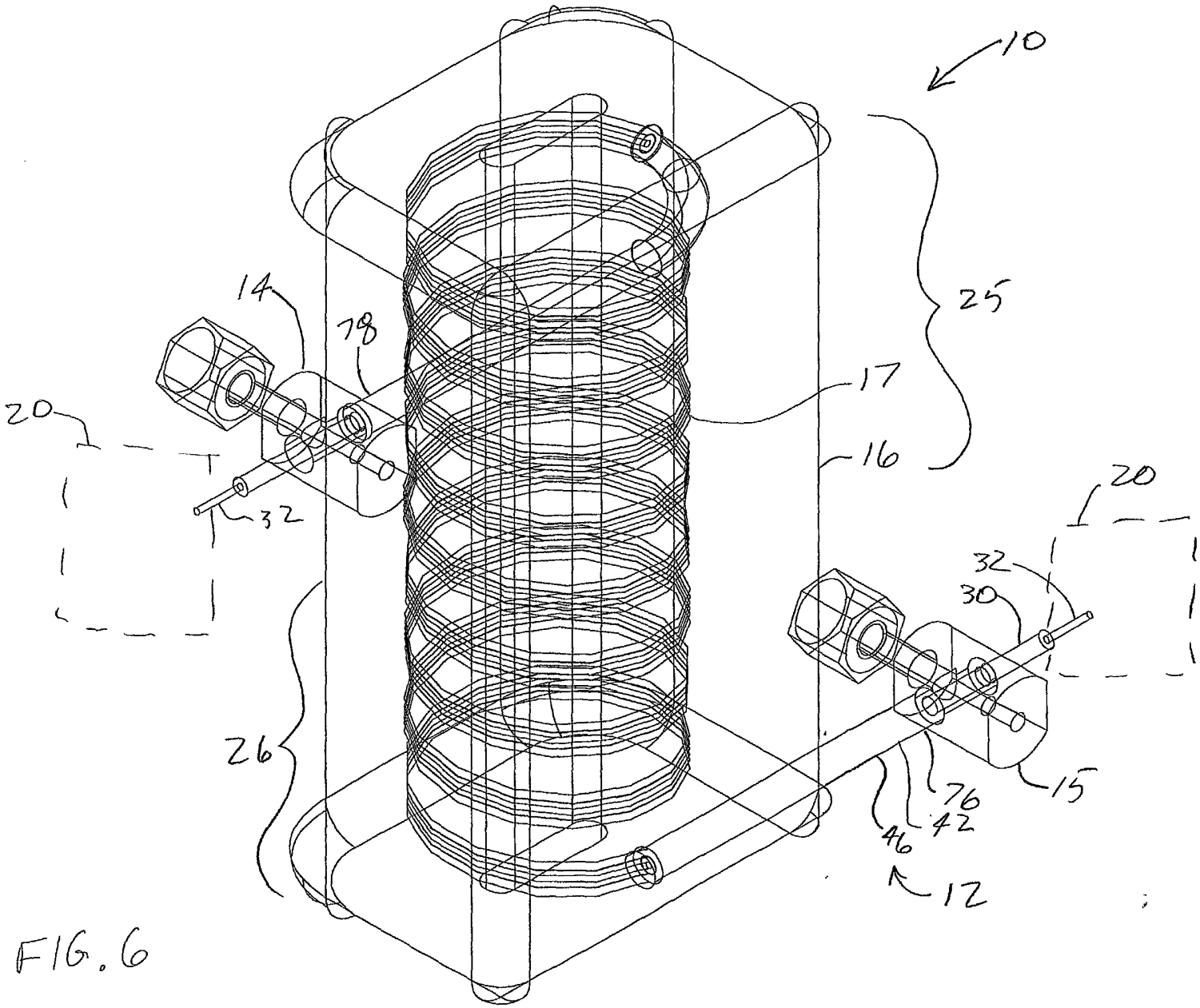

FIG. 6

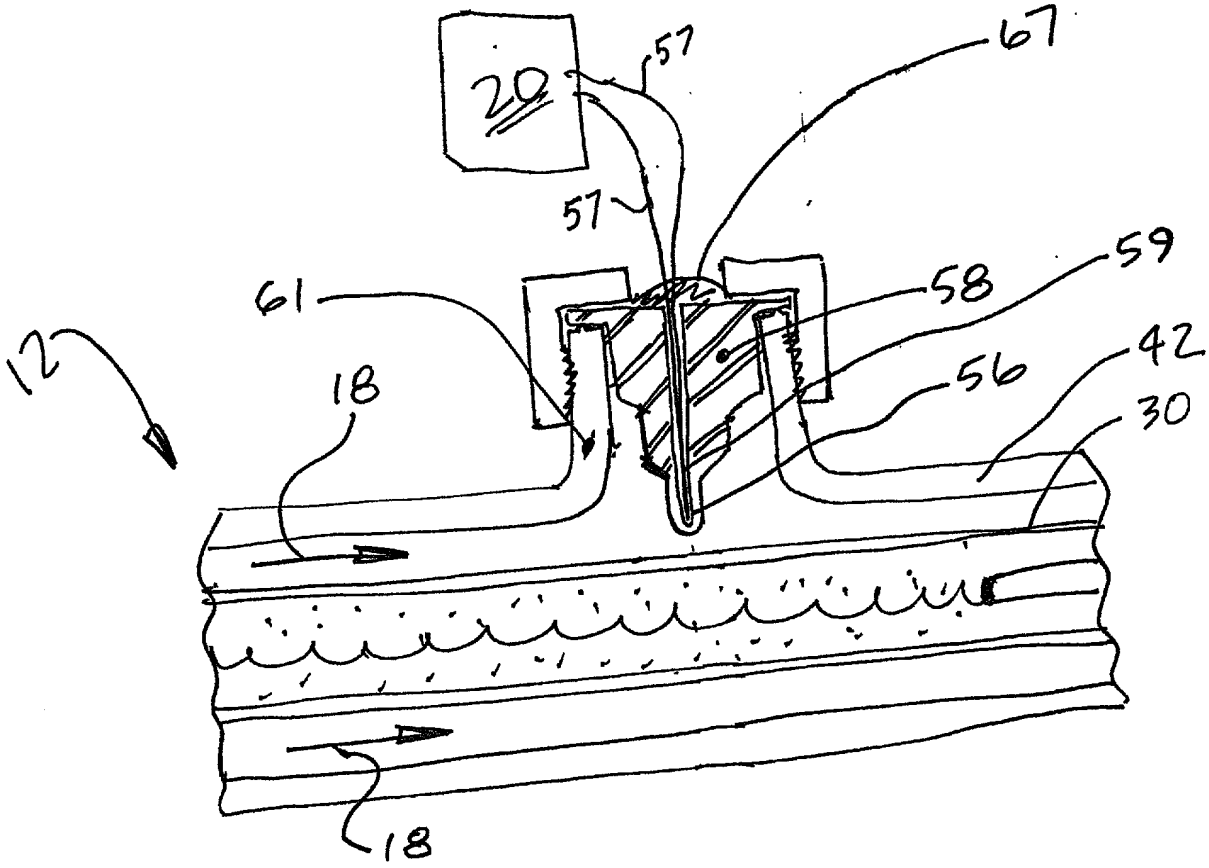

FIG. 7

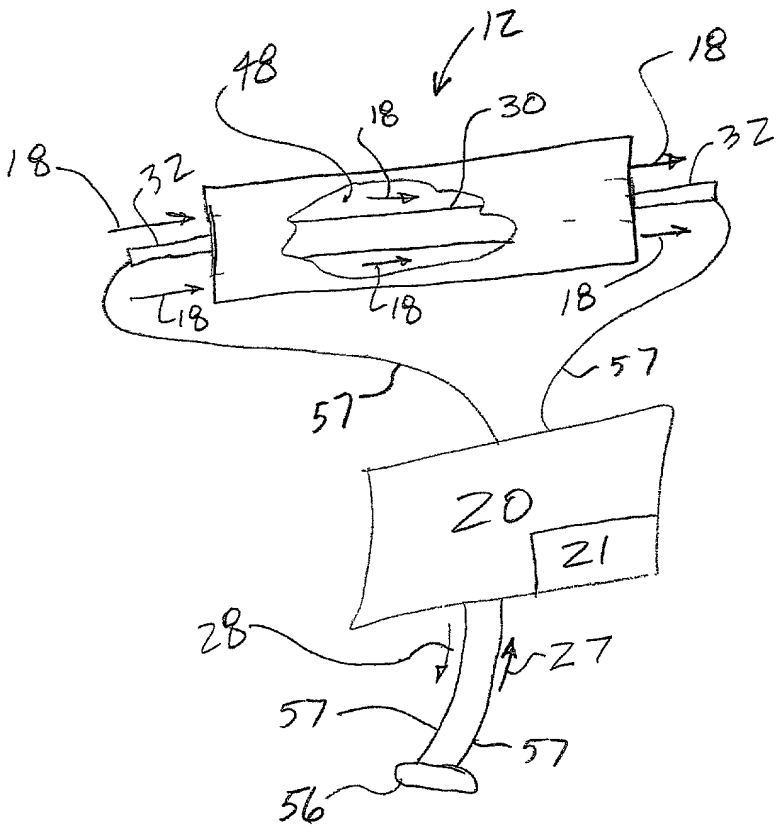

FIG. 8

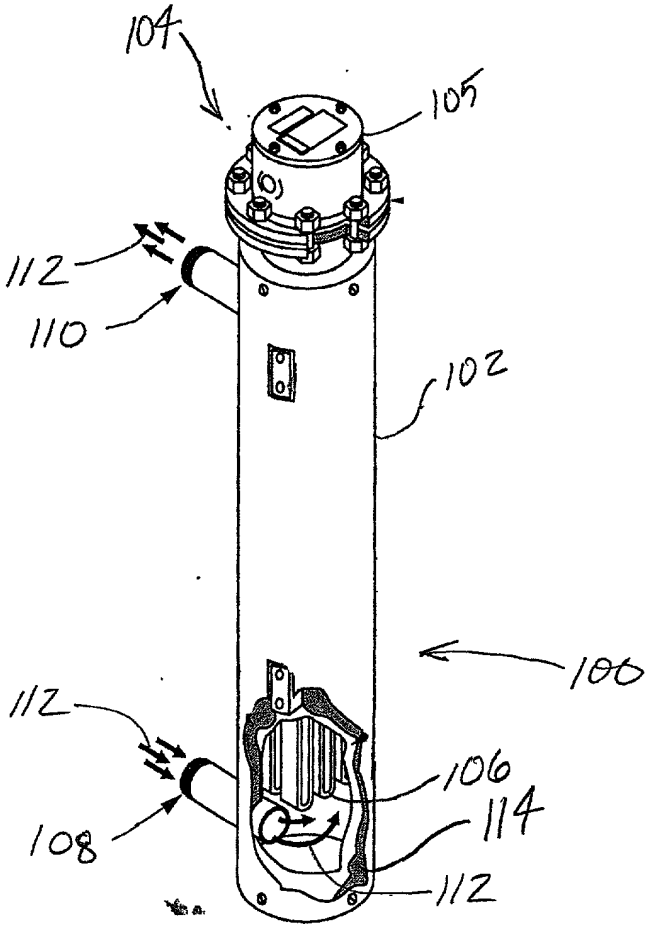

FIG. 9

PRIOR ART

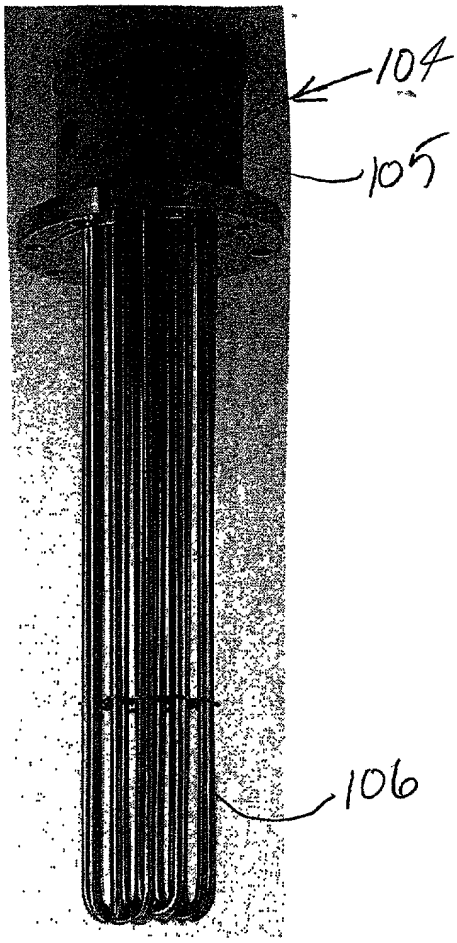

FIG. 9A

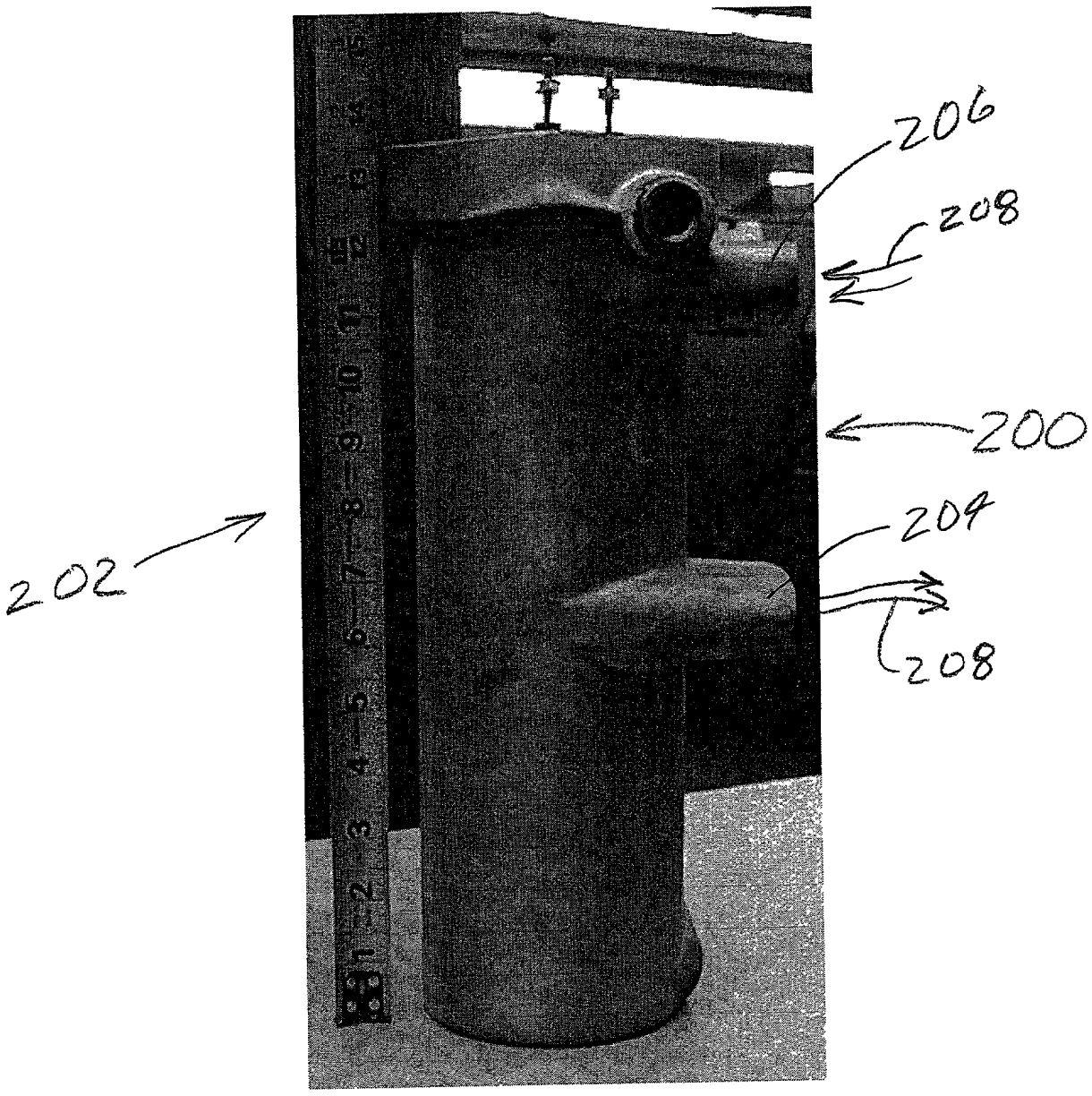

FIG. 10

PRIOR ART

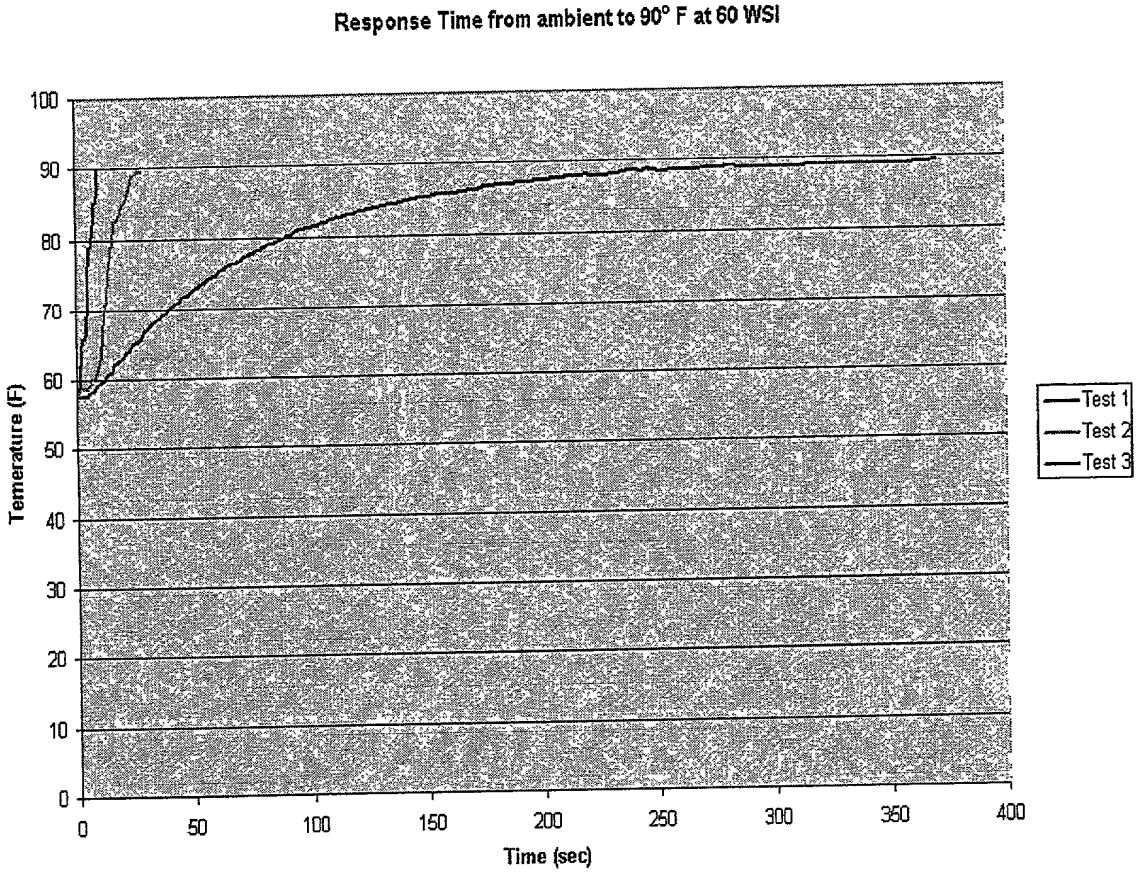
Response Time from ambient to 90° F at 60 WSI
Temerature (F)
100
90
80
70
60
50
40
30
20
10
0
0
50
100
150
200
250
300
350
400
Time (sec)
Test 1
Test 2
Test 3

FIG. 11

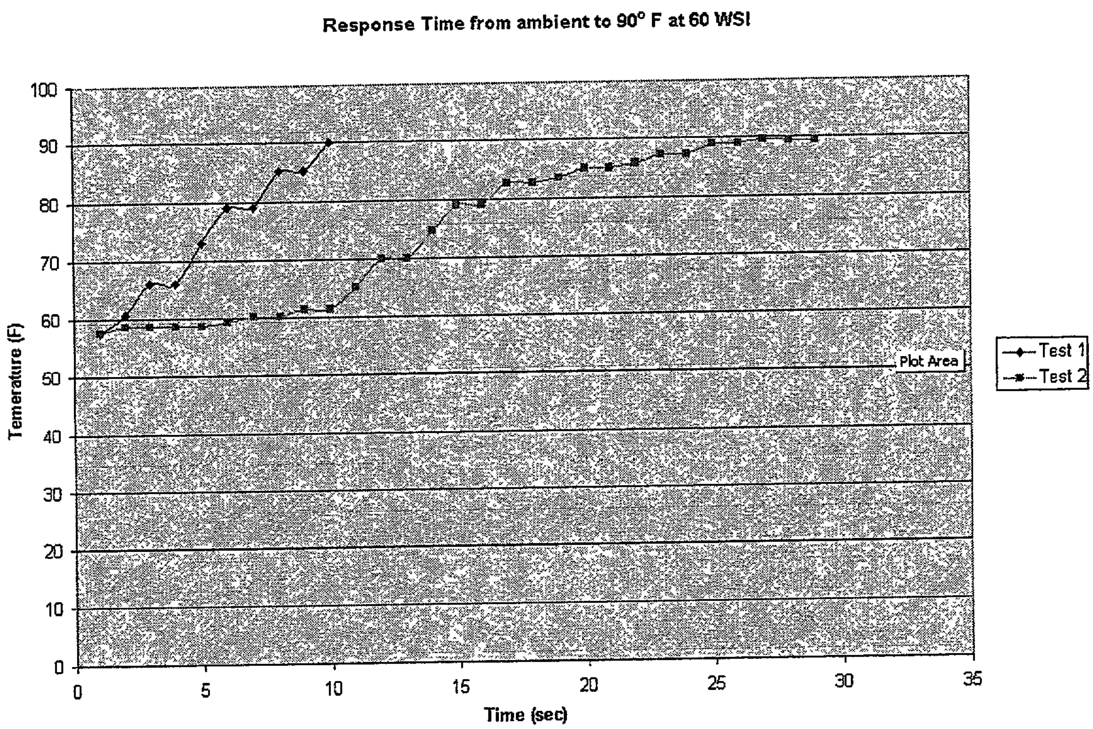

FIG. 12

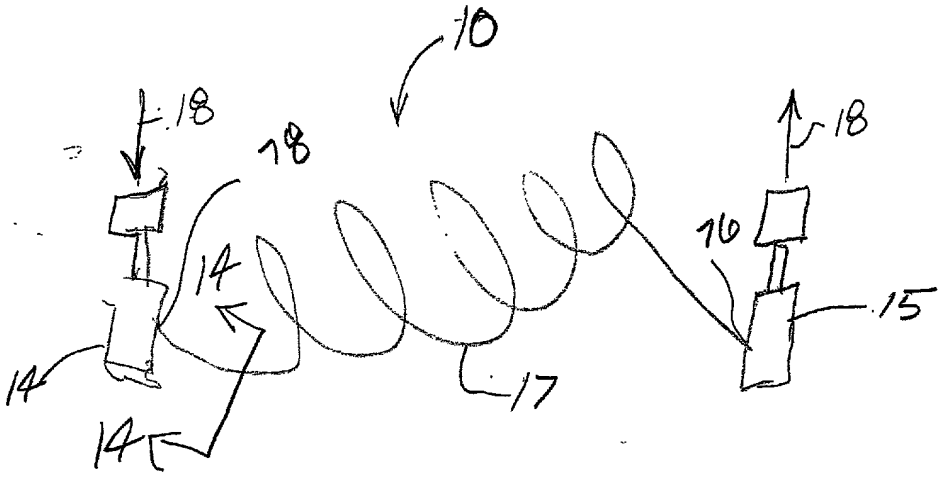

FIG. 13

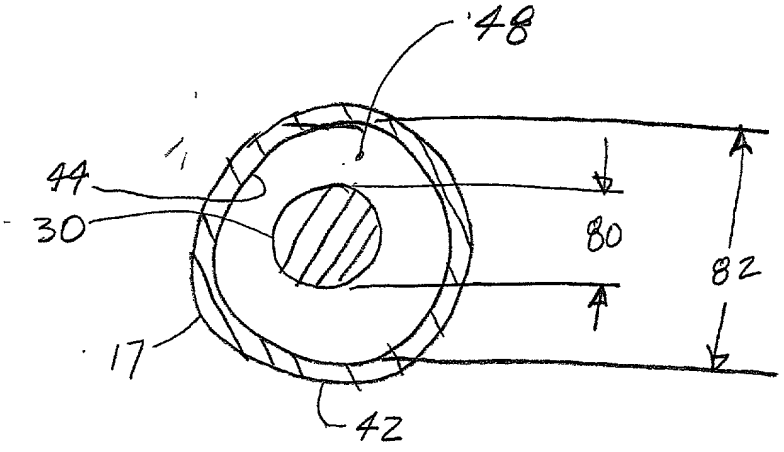

FIG. 14

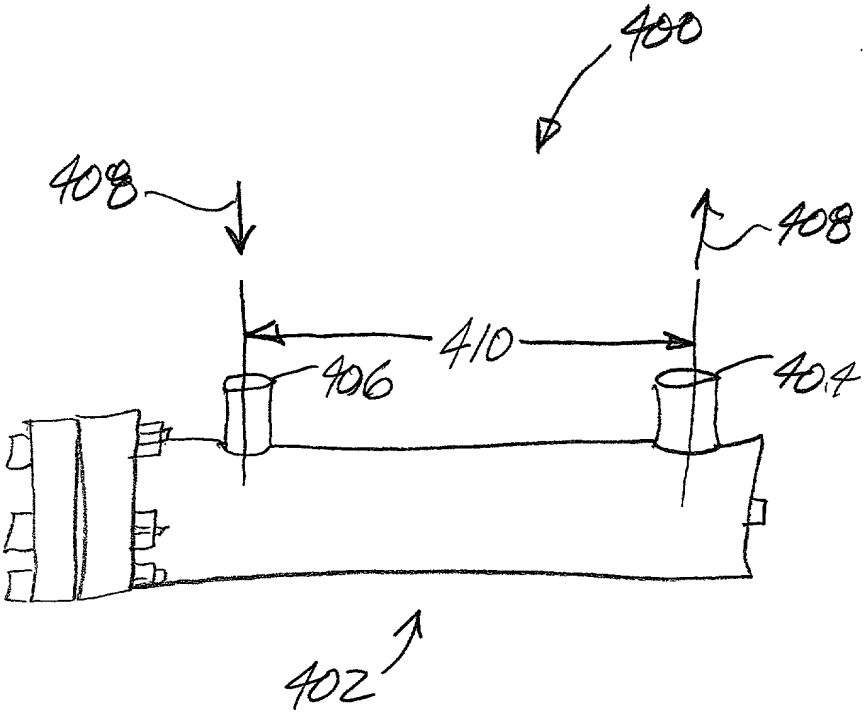

FIG. 15

FIG. 16

PRIOR ART

Thermal Properties of Air @ Various Temperatures & 500 psig

Temperature, F	68	216	500	1000
Specific Heat Capacity, C_p	.241	.243	.250	.264
Thermal Conductivity, K	.0134	.0143	.0157	.0180
Viscosity, Absolute, μ	.0442	.0540	.0715	.0977
Density, ρ	2.62	2.06	1.43	0.94

C_p = BTU/lb-°F
K = BTU/Ft – hr - °F
μ = lb/Ft – hr
ρ = lb/Ft^3

FIG. 17